

VIII.3.3-DELTA-TS RATE OF CHANGE OF TIME SERIES OPERATION

Identifier: DELTA-TS

Operation Number: 45

Parameter Array: The FORTRAN identifier used for the parameter array is PO. The contents of the PO array are:

<u>Position</u>	<u>Contents</u>
1	Operation version number
2-3	Input time series identifier
4	Input time series data type code
5	Input and output time series data time interval (hours)
6-7	Input time series identifier
8	Input time series data type code
9	Initial carryover indicator: 0 = default value used 1 = value input
10	Unused (set to 0.01)

Carryover Array: The FORTRAN identifier used for the carryover array is CO. The CO array contains one value which is the value of the input time series at the carryover date. If no carryover is initially read the value is set to -989.0 and the rate of change for the first time period of a run is set to 0.0 (if value for the first data time interval is not missing).

Subroutines Names and Functions: Subroutines associated with this Operation are:

<u>Subroutine</u>	<u>Function</u>
PIN45	Input information and stores values in the PO and CO arrays
PRP45	Print information stored in the PO array
PRC45	Print the carryover
PUC45	Output cards in the same format as the input data

Subroutine Function

COX45 Transfer carryover values

EX45 Execute the Operation

TAB45 Make entry into the Operations Table

Subroutines PIN45, PRP45, PRC45, COX45, and PUC45 have the standard argument lists for these subroutines as given in Section VIII.4.3. Debug output is only generated by the PIN45 subroutine (contents of PO and CO arrays) and COX45 subroutine (old and new parameters and carryover).

SUBROUTINE EX45 (PO,CO,QIN,QOUT)

Function: This is the execution subroutine for Operation DELTA-TS.

Argument List:

<u>Variable</u>	<u>Input/ Output</u>	<u>Type</u>	<u>Dimension</u>	<u>Description</u>
PO	Input	R*4	Variable	Parameters and other information
CO	Both	R*4	Variable	Carryover
QIN	Input	R*4	Variable	Input time series
QOUT	Output	R*4	Variable	Output time series

SUBROUTINE TAB45 (TO,LEFT,IUSET,NXT,LPO,PO,LCO,TS,MTS,LWORK,IDT)

Function: This is the Operations Table entry subroutine for Operation 'DELTA-TS'.

Argument List: The arguments for this subroutine are similar to the arguments for the Operation Table entry subroutines for other Operations. A description of the arguments is contained in Section VIII.4.2-TAB.

Operation Table Array: The contents of the TO array are:

<u>Position</u>	<u>Contents</u>
1	Operation number
2	The location in the T array of the next Operation to be executed
3	The location of the parameter array for this Operation in the P array
4	Location of the carryover array for this Operation in the C array
5	Location of input time series in the D array
6	Location of output time series in the D array